

# Wenita Forestry Natural Areas Assessment Form

## Site Location Description

Site Name:	Redpath Road Bog		
Location:	Berwick		
Catchment:	Meggat Burn		
Region:	Berwick		
Compartment ID:	116		
NZMS Grid Reference		GPS Coordinates	
NZMS Grid Reference		East	169° 56' 2414
East	1 362 790	North	45° 56' 3991
North	4 907 570	Accuracy	
Area in Hectares from GIS	10.2		
Aerial Photograph Reference	V 399-2586		

## Site Assessment

Assessment Date(s)	15/5/2017
Revision Date (s)	13/5/2017
Final Report Date (s)	13/5/2017
Assessed By	Mike Mullan (Wenita)
Recorded By	Mike Mullan (Wenita)
Notes:	

## Primary Vegetation Type

**Tick box as appropriate**

Primary native forest (undisturbed) with emergent podocarps	
Modified native forest (disturbed through logging of native timber)	
Secondary (regenerated forest after land clearance)	
Re-vegetated forest (re-established on bare land through planting)	
Heavily modified (dominated by weed and exotic species)	
Pasture land (predominantly exotic grassland with some weeds)	
Tussock grassland with typical native shrub species	
Wetland (predominantly wetland/marshland)	<input checked="" type="checkbox"/>
Exotic Production Forestry	

Notes:

A significant area of high country tussock bog/wetland. Significant water flow in and out of the site including an active spring.

<b>(Predominant) Vegetation Health</b>	<b>Describe as appropriate</b>
Did the primary, modified or secondary forest sites have significant canopy gaps? If yes give an estimate of the number of these and their approximate size.	N/A
<p>In the primary, modified or secondary forest sites show signs of regeneration of native seedlings and shrub size species in the forest floor using the following;</p> <ol style="list-style-type: none"> <li>1. No visible seedlings</li> <li>2. Occasional but sporadic and sparse</li> <li>3. Very common almost every step with a few gaps</li> <li>4. Abundant and thick making access difficult</li> </ol>	N/A
<p>In the primary, modified or secondary forest sites was the plant composition of the forest floor intact with fern and other smaller ground cover species?</p> <ol style="list-style-type: none"> <li>1. No visible forest floor species</li> <li>2. Occasional but sporadic and sparse</li> <li>3. Very common almost every step with a few gaps</li> <li>4. Abundant and thick making access difficult</li> </ol>	N/A
In the tussock grassland with typical native shrub species were there visible gaps, areas of bare vegetation, or areas dominated by exotic forest species visible in the site? If yes give an estimate of the number of these and their approximate size.	Older pig rooting around fringes that have been previously recorded
<p>In the tussock grassland sites was there evidence of regeneration of the native plant cover of grass, shrub and groundcover across the site using the following:</p> <ol style="list-style-type: none"> <li>1. No visible seedlings</li> <li>2. Occasional but sporadic and sparse</li> <li>3. Very common</li> <li>4. Abundant</li> </ol>	3. Very common
In the wetland (predominantly wetland/marshland) sites visible gaps, areas of bare vegetation, or areas dominated by exotic forest species visible in the site? If yes give an estimate of the number of these and their approximate size.	Older pig rooting around fringes that have been previously recorded
In the tussock grassland sites was there evidence	3. Very common

<p>of regeneration of the native plant cover of grass, shrub and groundcover across the site using the following:</p> <ol style="list-style-type: none"> <li>1. No visible seedlings</li> <li>2. Occasional but sporadic and sparse</li> <li>3. Very common</li> <li>4. Abundant</li> </ol>	
<p>Notes:</p> <p>The site was a wetland/bog area of some typical tussock grassland species with wetland species in the central core including several large wire-rush dominated areas.</p>	

Describe the presence, density and species of weeds within the assessed area and give estimations of the potential cover of those species.

<b>Pest Plant Presence</b>					
<b>Vine Species</b>	<b>Heavy &gt;50% Canopy</b>	<b>Moderate &gt;10-30% Canopy</b>	<b>Light &lt;5-10% Canopy</b>	<b>Sparse &lt;5% Canopy</b>	<b>None Not Observed</b>
Muehlenbeckia					<input checked="" type="checkbox"/>
Passionfruit					<input checked="" type="checkbox"/>
Old Man's Beard					<input checked="" type="checkbox"/>
Chilean Flame Creeper					<input checked="" type="checkbox"/>
Convolvulus					<input checked="" type="checkbox"/>
Other					<input checked="" type="checkbox"/>
Are there multiple vine species present? (If yes describe)	N/A				
Are the vines species limited to gullies or area fringes? (Describe)	N/A				
Notes:					
No visible vine species present in this area.					

## Pest Plant Presence

Shrub Tree Species	Heavy >50% Area	Moderate >10-30% Area	Light <5-10% Area	Sparse <5% Area	None Not Observed	Peripheral edges of area? Yes/No?	Internal parts of area and advancing? Yes/ No?
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Gorse				<input checked="" type="checkbox"/>			
Broom					<input checked="" type="checkbox"/>		
H Honeysuckle					<input checked="" type="checkbox"/>		
Elderberry					<input checked="" type="checkbox"/>		
Hawthorn					<input checked="" type="checkbox"/>		
Spanish heath					<input checked="" type="checkbox"/>		
Willow					<input checked="" type="checkbox"/>		
Sycamore					<input checked="" type="checkbox"/>		
Wilding Pine <5 years				<input checked="" type="checkbox"/>		Yes	No
Wilding Pine >5 years					<input checked="" type="checkbox"/>		

Other (Describe)	The site has undergone the removal of wilding Pinus contorta and that work has been completed with a strong success. The few wildings observed were quite new. These have now been removed during the assessment.						
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Notes:

## Pest Plant Presence

Ground Cover Species	Heavy >50% Area	Moderate >10-30% Area	Light <5-10% Area	Sparse <5% Area	None Not Observed	Peripheral edges of area? Yes/No?	Internal parts of area and advancing? Yes/No
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Aluminium plant					<input checked="" type="checkbox"/>		
Periwinkle					<input checked="" type="checkbox"/>		
Ivy					<input checked="" type="checkbox"/>		
Nasella tussock					<input checked="" type="checkbox"/>		
Iris					<input checked="" type="checkbox"/>		
Blackberry					<input checked="" type="checkbox"/>		
Montbretia					<input checked="" type="checkbox"/>		
St John Wort					<input checked="" type="checkbox"/>		
Agricultural grasses			<input checked="" type="checkbox"/>			Yes	Yes

Other (Describe)							
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Notes:

Yorkshire fog grass was noted especially around the fringe areas of the site between the logged/replanted exotic forest areas on the western side of the site. This species has probably come into the site through over-sowing during the post logging site preparation phase of adjacent exotic forest management.

## Pest Animal Presence

Species	Heavy Significant faeces sign, marking or prints. Animals seen or heard	Moderate Fresh scattered sign, prints or marking in areas	Light Uncommon sign, marking or prints in area	Sparse Very uncommon sign, marking or prints in area	None Not Observed	Domestic stock sign is the area fenced? Yes /No?	Does the area border a farm Yes/No?
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Opossum					<input checked="" type="checkbox"/>	No	No
Deer					<input checked="" type="checkbox"/>	No	No
Pigs					<input checked="" type="checkbox"/>	No	No
Goats					<input checked="" type="checkbox"/>	No	No
Sheep (Wild)					<input checked="" type="checkbox"/>	No	No
Cattle (Wild)					<input checked="" type="checkbox"/>	No	No
Feral Cat					<input checked="" type="checkbox"/>	No	No
Mustelids					<input checked="" type="checkbox"/>	No	No
Vermin					<input checked="" type="checkbox"/>	No	No

Other (Describe)	
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Are there known animal control programmes undertaken in this area? (Describe)	Has had a 1080 drop within the last 12 months
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Is the number of recreational hunting permits and animals harvested from the area known for the last 12 months? (Describe)	No, but the Berwick forest has reopened to recreational hunting in the last 3 months
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Notes:

## Uncontrolled Human Impacts

Activities	Common use within the area,	Occasional incursions into the	Light Sporadic use	Sparse	None
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	heavy vehicle tracks	area			
4 WD Ute/Car					<input checked="" type="checkbox"/>
4WD Quad Bike					<input checked="" type="checkbox"/>
Motor Bike					<input checked="" type="checkbox"/>
Mountain Biking					<input checked="" type="checkbox"/>
Fire-wooding					<input checked="" type="checkbox"/>
Camping/Fires					<input checked="" type="checkbox"/>
Camping/Toileting					<input checked="" type="checkbox"/>
Hunting (unpermitted)					<input checked="" type="checkbox"/>
Dumping Vegetation					<input checked="" type="checkbox"/>
Dumping Household					<input checked="" type="checkbox"/>
Notes:					

Note the type and number of bird species found within the area. This is not a definitive count or an estimate of abundance only an observation based on the time of assessment.

<b>Avian Fauna</b>		
Native Species	Number	Notes
Falcon	0	
Tui	0	
Bellbird	0	
Kereru	0	
Robin	0	
Tomtit	0	
Morepork	0	
Shining cuckoo	0	
Silvereye	0	
Fernbird	0	
Scaup	0	
Pukeko	0	
Other (Describe)	No observations on inspection	

Note the type and number of bird species found within the area. This is not a definitive count or an estimate of abundance only an observation based on the time of assessment.

## Avian Fauna

Exotic Species	Number	Notes
Blackbird		
Sparrow		
Starling		
Harrier		
Thrush		
Rosella		
Magpie		
Geese		
Mallards		
Chaffinch	3 +	
Other (Describe)	Swallows were noticed around small pond at road edge	

## Water Catchment Overview

	Yes	No	Estimated Number
Major water bodies (>5 metre in width) within its boundaries?			
Minor water bodies (<5 in width) within its boundaries?	<input checked="" type="checkbox"/>		4-5
Are there wetlands, bogs or fens within the areas boundaries?	<input checked="" type="checkbox"/>		Entire area
Artificial water races or water courses?			
Storage ponds or dams		<input checked="" type="checkbox"/>	
Does the area have an existing SHMAK monitoring site within it?		<input checked="" type="checkbox"/>	
Do roading culverts run into the area?	<input checked="" type="checkbox"/>		1-2
Notes:			
<p>This area is a significant wetland site that has multiple narrow streams running into and through the site. Significant water flow comes out of this area into an adjoining similar site.</p>			

## Landscape and Connectivity

Describe the shape of the assessed area.

- a) A narrow long strip < 50 metres wide adjacent to a waterway
- b) A narrow long strip <50 metres wide adjacent to farmland or exotic forest
- c) A small patch <1-2 hectares
- d) A compact core area with outer strips reaching out from the core
- e) A solid compact defined area
- f) Neither (Describe)

D. A compact core has a series of narrow vegetated strips running usually along small tributaries into the main body of the site.

Is the area isolated from similar sites within the location? (i.e. surrounded by exotic forest)

- a) The area is surrounded by exotic forest
- b) The area is surrounded by pasture or farm land
- c) There are similar sites within 5-10 kms
- d) There are other similar sites within 2-5 kms
- e) There are other similar sites <1 km
- f) There are other sites immediately adjacent
- g) Unknown (Describe)

E. There were a number of other sites with similar water and vegetation values immediately to the north of the site and within 300-400 metres. These sites were of a similar scale.

Notes:

## Natural Area Ranking Classification

Rank

Description

Criteria

Score



5	<b>Exceptional</b>	<ul style="list-style-type: none"> <li>• Large undisturbed site</li> <li>• No exotic weeds or introduced species</li> <li>• Highly endemic and representative to the particular ecological district</li> </ul>	
4	<b>Very High</b>	<ul style="list-style-type: none"> <li>• Last example of its type which was previously widespread in the district</li> <li>• Some peripheral disturbance to vegetation in pre European period</li> <li>• Creates a large continuous section across the area</li> <li>• &gt;200 hectares with minor &lt;5% weed or introduced species cover along fringes</li> <li>• Secondary vegetation creates buffer to "exceptional" areas</li> </ul>	
3	<b>High</b>	<ul style="list-style-type: none"> <li>• Modified native vegetation representative of the district and with elements of former composition remaining</li> <li>• Contains areas of modified secondary vegetation which provides a buffer to "very high" areas</li> <li>• &gt;75 hectares with small areas of weed infestation on the outer fringes (10-20%)</li> <li>• Last of the vegetation type in the district but in a modified condition through historical change</li> </ul>	3
2	<b>Moderate</b>	<ul style="list-style-type: none"> <li>• Substantial human modification of areas</li> <li>• Small areas of disparate native vegetation</li> <li>• Occasionally act as buffers to larger higher quality sites</li> <li>• Very high weed dominance along fringes moving towards outer core</li> <li>• Native vegetation cover &gt;10-25% of the area</li> </ul>	
1	<b>Low</b>	<ul style="list-style-type: none"> <li>• Very small disjointed areas of native vegetation (sporadic trees or shrubs)</li> <li>• Heavy dominance of exotic vegetation and weeds</li> <li>• Heavily modified landscape and landforms</li> <li>• Examples of secondary succession caused by human disturbance that has created a vastly different vegetation type than previously found</li> </ul> <p>Native vegetation covers &lt;10% of area</p>	

Notes:  
This is area is a high value wetland/bog that sits within a surrounding gully and plain that is bordered by production forestry. It forms a significant wetland catchment and has a good degree of vegetation diversity including the wire-rush areas in the central core. The sloping peripheral areas have merged some exotic grasslands with native grassland and shrub species, but the distinction between the peripheral boundary and production areas is not well defined at times.

## Recommendations and Additional Comments

- Attention to the broadcast over-sowing of grass species during exotic planting periods of

adjacent areas needs to be carefully managed to ensure that exotic grass species do not overrun the peripheral areas of the site.

- Pig numbers need constant reduction and accessibility to the area for regular hunting would help place pressure on pig numbers.
- These tussock/wetland sites need control of wilding numbers on a bi-annual basis to keep numbers under control.

Record photographs and their storage of this site assessment

### Photographic Recording

File number	Storage path	Date Taken	Photographer
Redpath road		15/5/2017	Mike Mullan

